Whites

Whites made up 77.1% of the U.S. population ages 35 years and older in 2000. During 1991–1998, the age-adjusted stroke death rate for whites in this age group was 117/100,000.

The national map of age-adjusted, spatially smoothed stroke death rates for all whites shows considerable geographic disparity across the 3,095 counties for which sufficient data existed to calculate rates. County death rates ranged from 53 to 231/100,000. An approximately twofold difference existed between the midpoint of the highest quintile (187) and the midpoint of the lowest quintile (83). The quintile ranking for each county is depicted on the national map, with the darkest color representing counties with the highest rates and the lightest color representing counties with the lowest rates.

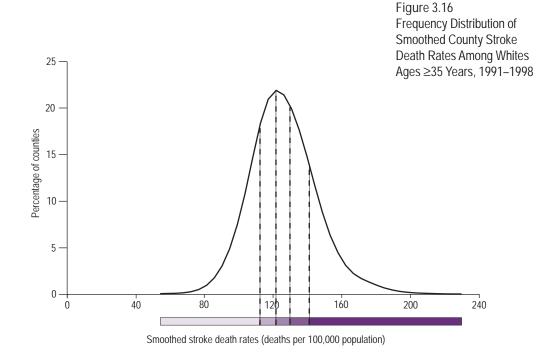
The frequency distribution shows the range of smoothed stroke rates for whites (Figure 3.16). The vertical dotted lines and the graded color bar along the x-axis illustrate the quintiles into which counties were divided on the basis of these rates.

According to the map, the highest stroke death rates for whites were reported in counties concentrated primarily in two areas of the Southeast. The first area encompasses the Piedmont and coastal counties of South Carolina and North Carolina, much of Virginia, and many of the southern, rural Georgia counties of the Cotton Belt. The second area is the Mississippi Delta, including nearly all of Arkansas, northwestern counties of Mississippi, much of Tennessee, and parts of Kentucky. Other groupings of counties in the highest quintile were reported in northern Michigan, northwestern Oregon, and parts of central Texas and around San Francisco. Counties in the lowest quintile were reported primarily in the Northeast, southern Florida, and parts of the Great Plains and Southwest. Alaska and Hawaii also had counties in the lower quintiles.

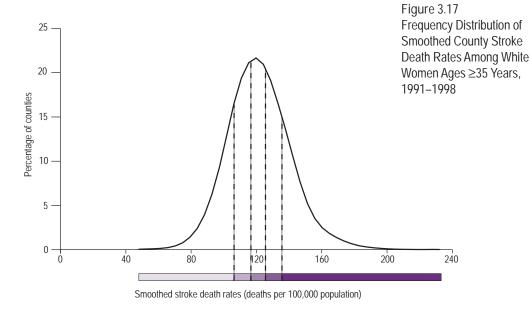
Women and Men

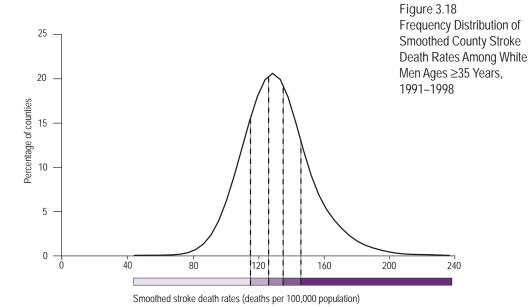
During 1991–1998, the age-adjusted death rate for stroke was 113/100,000 for white women and 121/100,000 for white men ages 35 years and older.

The maps of age-adjusted, spatially smoothed stroke death rates for white women and men show considerable geographic disparity across the counties for which sufficient data existed to calculate rates. For white women, county death rates ranged from 51 to 229/100,000. The range for white men was 42 to 229/100,000. For both women and men, an approximately twofold difference existed between the midpoint of the highest quintile (184 for women, 189 for men) and the midpoint of the lowest quintile (79 for women, 79 for men).



National Maps of Stroke Mortality by Race, Ethnicity, and Gender





The frequency distributions show the range of smoothed stroke death rates for white women (Figure 3.17) and men (Figure 3.18) in all counties for which rates were calculated.

The maps indicate that for both white women and men, a majority of the counties in the southeastern states (except Florida) were in the two highest quintiles of stroke death rates. The southeastern coastal states (Virginia, North Carolina, South Carolina, and Georgia) and parts of the Mississippi Delta had dense concentrations of counties in the highest quintiles for white women and white men. Differences in the geographic patterns between women and men were observed in the midwestern and western states. For white women, many of the counties in the western states were in the highest quintile. For white men, western counties in the highest quintiles were concentrated primarily in the Pacific Northwest and northern California; concentrations of counties with high rates also were observed in North Dakota and South Dakota.

A Note on Methods

Stroke deaths were defined as those for which the underlying cause of death listed on the death certificate was cerebrovascular disease, defined according to the *International Classification of Diseases*, 9th Revision, Clinical Modification (codes 430–438) (Washington, DC: Department of Health and Human Services; 1980). Stroke death rates were age-adjusted to the 2000 U.S. population and spatially smoothed using a spatial moving average. A detailed explanation of the methods used to generate these death rates and create the maps can be found in Appendix B.

